Dressing the sacrifice: textiles, textile production and the sacrificial economy at Casas del Turuñuelo in fifth-century BC Iberia

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The fifth-century BC site of Casas del Turuñuelo in south-western Spain provides unique information on the production and ritual consumption of textiles in Iron Age Iberia. Casas del Turuñuelo was a rural estate centre that was intentionally burned following a banquet and the sacrifice of over 50 domestic animals. Among the offerings are the earliest-known wool textiles and twill weaves on the Iberian Peninsula. This assemblage represents the most diverse textile collection found in the region to date, and provides the first glimpse of the role of textiles in the sacrificial economy of Iberia, and in prehistoric Europe more widely.

Keywords: Iberia, Casas del Turuñuelo, textiles, textile production, sacrificial economy

Introduction

Casas del Turuñuelo is located in the High Guadiana Meadows in Badajoz, south-western Spain. The site is an Iron Age rural estate centre comprising a large, two-storey building with adobe walls on stone foundations, surrounded by grounds constructed in the early sixth century BC. The site was abandoned in the late fifth century BC, when the complex

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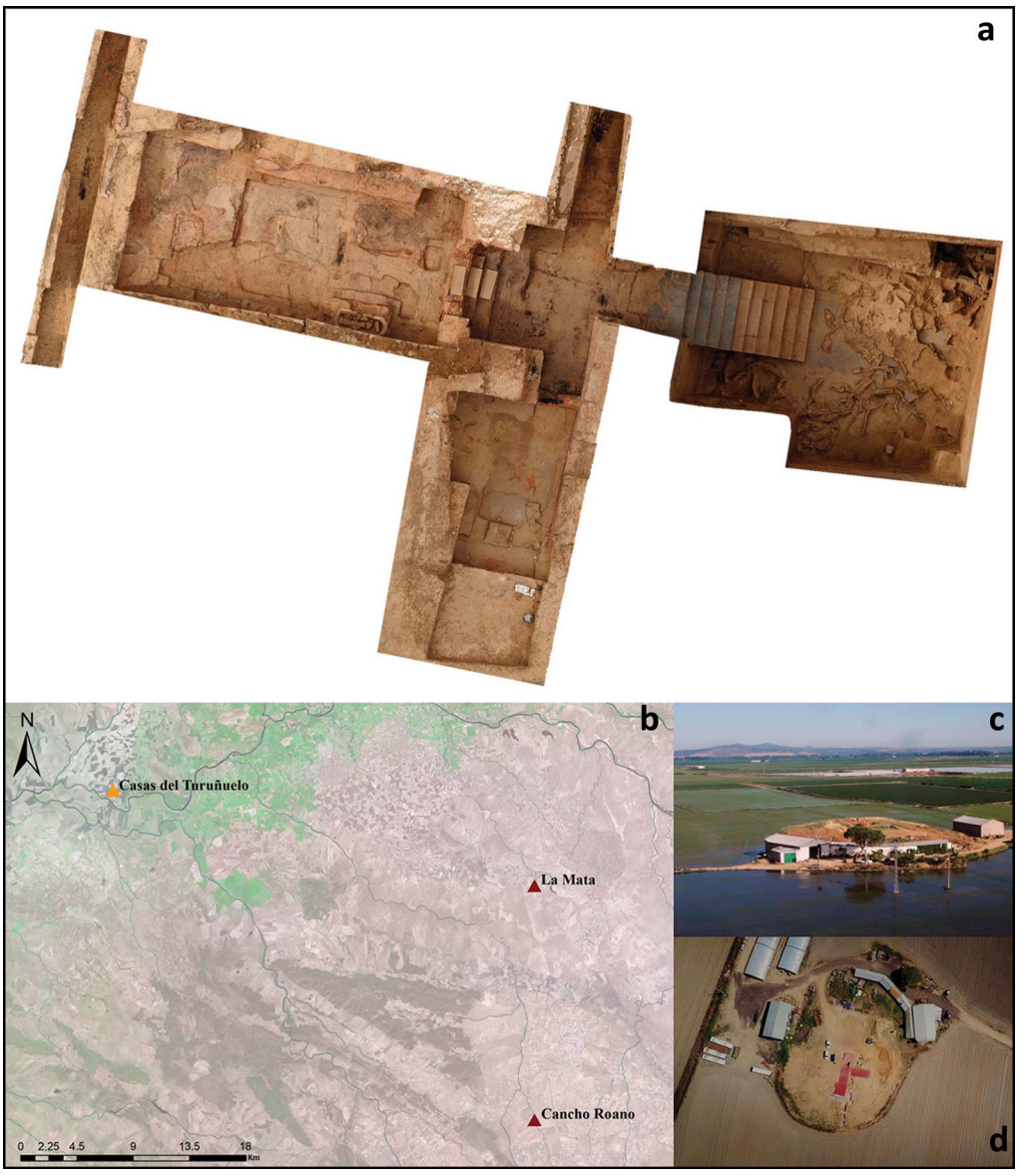

Figure 1. The site of Casas del Turuñuelo: a) aerial view of the building; b) map of the region; c) view of the site from the Guadiana River; d) aerial view of the site (figure by E. Rodríguez).

was intentionally set on fire and subsequently covered with a mound (Figure 1a–d). Since 2014, excavations have uncovered evidence for the sacrifice of a large number of animals in the lower level of the building, prior to its destruction by fire. A great staircase provided access to the upper part of the building where Room 100 served a ritual function, with the latter focused on an oxhide-shaped altar in the centre of the room and a long bench along its north wall.

Casas del Turuñuelo resembles and is related to the well-known sites of Cancho Roano and La Mata (Rodríguez Díaz 2014; Celestino & López-Ruiz 2016: 211–53), located only 45km distant (Figure 1b). Cancho Roano and La Mata were also large country estates that included residential, production, storage and ritual areas. The three sites had easy access to interregional and Eastern Mediterranean trade routes; they were well connected with Andalusia to the south and the Alentejo region in Portugal to the west, where Phoenicians founded several settlements from the ninth century BC onwards. Indeed, similar country estates with clear evidence of Phoenician-Punic influence have been excavated in both Andalusia and Portugal (Arruda & Celestino 2009; Jiménez Ávila 2009; Escacena & Coto 2010; Rodríguez Díaz 2014). Casas del Turuñuelo, however, is unique due to the presence of the animal sacrifice and the associated charred textiles and fibres presented here. The latter constitute the largest assemblage of its kind found to date in an Iberian Iron Age context. Alongside the textiles, 24 spindle whorls and 36 loom weights were also found, providing a compelling case study for the analysis of textile production and ritual consumption in Iron Age south-western Iberia. Most importantly, the site provides information concerning the role of textiles in ritual—particularly the Iron Age sacrificial economy—beyond classical Greece and Rome, and the Eastern and Central Mediterranean (Wengrow 2011; Gleba 2015; Brøns 2017; Brøns & Nosch 2017).

The sacrifice deposits are, to date, unique in the Mediterranean region. They derive from a large banquet in the South Room of the upper part of the building, as attested by the recovery of hundreds of ceramic vessels, as well as bronze braziers, and the ritual burning of an ovicaprid on the altar in Room 100 (Rodríguez-González & Celestino 2017). A large number of animals—52 horses (*Equus ferus caballus*), four cows (*Bos taurus*), four pigs (*Sus scrofa domestica*) and a dog (*Canis lupus familiaris*)—were slaughtered and deposited in the lower level of the residence. The articulated nature of the carcasses shows that they were not consumed as part of the banquet. These animals were burned as part of the sacrifice that took place in the building, together with more than a dozen amphorae (some containing cereals), Greek, Punic and fine local pottery and ivory plaques (Rodríguez-González & Celestino 2017), as well as the textiles that we present below. The sacrificial destruction of Casas del Turuñuelo in the late fifth century BC represents a significant and costly act that involved large quantities of valuable objects, materials and animals being taken out of circulation.

The survival of textiles, mats and textile-working tools at the site provides unique insights into the technical and technological characteristics of textiles in Iberia, and contributes to the study of the ritual use of textiles in the wider ancient Mediterranean. This article presents these important new finds for the first time, before discussing their significance for our understanding of the ritual production of textiles, Iron Age offerings and the sacrificial economy in late prehistoric Europe.

Materials

Textiles and mats

The textile and fibre remains were recovered during the 2016 and 2017 excavation seasons at Casas del Turuñuelo. The first batch of samples was found in the upper floor of the building

(stratum UE 112). This comprised the remains of mats made from esparto grass (*Stipa tenacissima*) or related monocot species, located on several areas on the floor (Figure 2); textile fragments and barley seeds were also found inside a grey ware vessel (Figure 3) situated in the anteroom at the entrance to Room 100 (UE 515) (Rodríguez-González & Celestino 2017: 191). The second series of textiles was recovered on the lower floor, immediately adjacent to the great staircase, together with three glazed vessels of Phoenician-Punic style (UE 606) (Figure 4).

Textile characterisation includes the determination of structural parameters, such as thread twist, diameter and angle; weave and thread count per centimetre (indicative of textile quality); and the presence of edges and any other distinctive elements, such as pattern and sewing (Emery 2009). Structural analysis was performed using a portable Dino-Lite digital microscope at 20×, 50× and 230× magnifications. Fibres were identified using a Hitachi TM3000 TableTop scanning electron microscope, using Margarita Gleba's reference collection for comparison.

The assemblage includes at least four different types of fabric (Table 1). Two are woven in plain or tabby weave (Figure 5a–b); this is the simplest loom-based structure, with both weft and warp threads going one under and one over. The tabbies are both relatively balanced, with approximately the same number of threads per unit of length, and are of similar quality. Both tabbies are made of plant fibre, probably flax.

The other two textiles are twills (Figure 5c–d). In an even 2/2 twill weave, each warp thread goes over two weft threads, then under two, with an offset in each row forming a diagonal pattern (Emery 2009: 92). In a 2/1 twill, the weft goes under two warp threads, then over one, while the warp goes over two wefts and under one (Emery 2009: 99). One of the Casas del Turuñuelo twills is a diagonal 2/2 twill woven with clockwise-, or z-twisted, yarn in one system and counter-clockwise-, or s-twisted, yarn in the other. The fabric had no preserved edges, so the direction of warp and weft cannot be determined. The second twill is a 2/1 lozenge twill, woven in yarn that was z-twisted and S-plied (two single z-twisted threads twisted together in an 'S' direction together to form a stronger, doubled yarn). Two fragments of this type were recovered from the lower floor and probably belong to the same textile. They are of exceptional quality in terms of thread count, with 30 warp threads per centimetre and 40 weft threads per centimetre; other archaeologically documented twills from Italy and Central Europe usually range between 15–25 threads per centimetre (Banck-Burgess 2012: 51; Grömer *et al.* 2013: 64; Gleba 2017: 1210). Both twills are made of sheep wool, which was combed or otherwise manually processed, as indicated by the presence of parallel fibres with cuticular scales aligned in opposite directions. Despite processing, some of the thicker fibres are still present (Figure 5d: right).

In addition to the textiles, an unidentifiable object comprising what appear to be z-twisted linen threads was recovered from the same context (Figure 6a) as the two twills. The threads are unusual in that the fibres are not separated but cling together in ribbons. This feature is typical for spliced yarn, which is made by removing fibre ribbons from the plant and then twisting them together either continuously, or at the ends (Gleba & Harris 2018). Spliced yarns are inherently unstable and have to be plied, yet the threads appear to be single rather than plied, which suggests that the object in question may have been a skein, or ball, of semi-finished yarn. Finally, at least three accumulations of fine, plant, bast fibres (probably flax) were found with the wool textiles (Figure 6b).

Figure 2. Top) aerial view of the upper floor with locations of esparto grass matting indicated; bottom) close-up photographs of the esparto matting (figure by E. Rodríguez).

Figure 3. Grey ware vessel containing remains of the textile and barley seeds (figure by E. Rodríguez).

Textile tools

Textile tools recovered at Casas del Turuñuelo include 24 spindle whorls and 36 loom weights (Figure 7). Both types of tools were recovered from the anteroom of the upper floor. Some spindle whorls were also found in the South Room, where the sumptuous banquet took place, and on the lower floor, to the right of the stairs in association with the textiles (Figure 8). The analysis of textile tools provides important information about textile production. The functional characteristics of spindle whorls and loom weights, for example, allows a reconstruction of the type of thread that was spun and the quality of the resulting cloth by studying the functional characteristics of spindle whorls and loom weights (Mårtensson *et al.* 2009; Andersson Strand & Nosch 2015). The rare survival of textile fragments at Casas del Turuñuelo permits a comparison of the evidence provided by analysis of both the structural characteristics of the textiles and the textile tools.

Spindle whorls

A spindle whorl is a small symmetrical object with a central perforation. The whorl is inserted onto a spindle in order to facilitate the spinning of fibres into thread (Barber 1991: 51–53). Spindles are used for draft spinning raw fibres, such as wool or flax, by simultaneously drafting and twisting them. The weight, diameter and shape of a spindle whorl determine the thickness and twist angle of the resulting thread and, hence, its quality (Grömer 2005; Mårtensson *et al.* 2009: 374).

The 24 spindle whorls found at Casas del Turuñuelo are light, weighing from 1–27g (Figure 9). Most weigh less than 14g and have a maximum diameter of less than 31mm; they would have been suitable for spinning very fine (1–7g) and fine (8–12g) thread

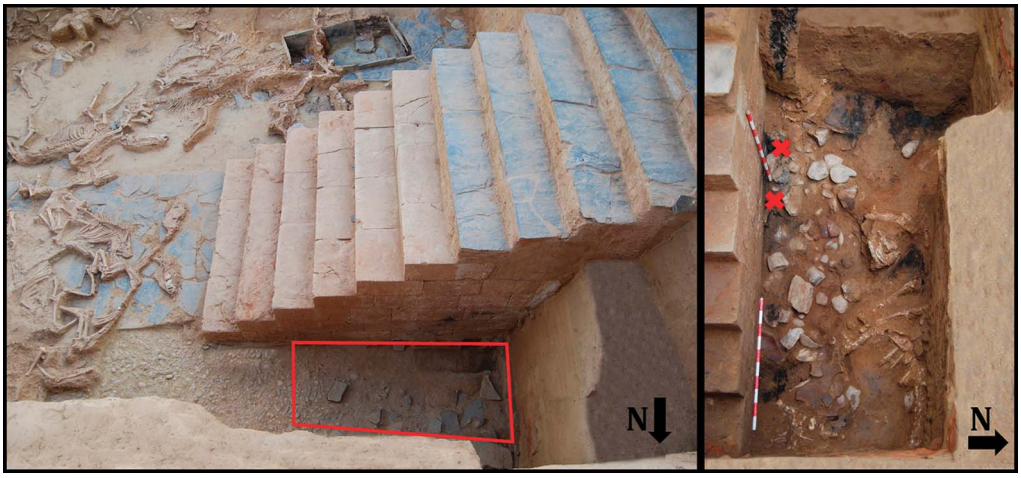

Figure 4. Views of the lower floor; findspots of textiles and fibres near the monumental staircase are indicated on the left, with a close-up of the area on the right (figure by E. Rodríguez).

(Mårtensson *et al.* 2009). Figure 9 shows that spindle whorls excavated at Casas del Turuñuelo are comparable in weight and size to those recovered from the contemporaneous settlements of Cancho Roano and La Mata (Berrocal-Rangel 2003; Marín-Aguilera in press).

Loom weights

Loom weights are used to keep sets of warp threads taut in a vertical warp-weighted loom—the prevalent type of loom in pre-Roman Europe (Barber 1991: 93–113). The tension created by the loom weights facilitates the insertion of the horizontal weft threads. Warp threads of different material, diameter and strength require different tensions for optimal weaving. Loom weights of different weight and thickness are therefore suitable for different types of weaves.

Archaeological experiments have yielded valuable information regarding the functional properties of loom weights (Mårtensson *et al.* 2009: 392). The number of warp threads, for example, that can be attached to a loom weight ranges between 5 and 50, depending on the type of textile being woven (Lena Hammarlund *pers. comm.*). Although the diameter of the thread determines the appropriate tension, other important parameters include how tightly the thread was spun and the type and quality of fibre (Andersson Strand 2010: 18; Grömer 2016: 112). Thus, thick and thin threads require different tensions in the loom, which are attained by using lighter or heavier weights, and/or by varying the number of threads per loom weight.

The shape of the loom weight is also important for achieving higher or lower thread density. Discoid and pyramidal loom weights—the predominant types at Casas del Turuñuelo (Figure 10)—require less space than spherical weights when set in a row, and are therefore suitable for the production of denser textiles. Most of the loom weights from Casas del Turuñuelo weigh less than 800g, with two groups distinguishable between 200–400g and 550–750g, respectively. This would have allowed for the production of a variety of textiles. Calculations were made for the three weaving techniques identified in the Casas del Turuñuelo's textiles—tabby, 2/1 twill and 2/2 twill (Tables 2–4)—following the method developed by

Table 1. Technical textile data (thread counts are in threads per centimetre; * indicates splicing; angle measurements according to Emery 2009: 12).

Find no. (context)	Weave	Material	Warp count	Weft count	Warp twist	Weft twist	Warp diameter (mm)	Weft diameter (mm)	Warp angle	Weft angle
Turu 6 (UE 606)	Tabby	Flax	15	12	z	z	0.2–0.3	0.2–0.3	Medium	Medium
(UE 515.18)	Tabby	Flax?	16	12	z	z	0.3–0.4	0.3–0.4	Medium	Medium
Turu 4 (UE 606)	?	Flax	–	–	z*	–	0.1–0.3	–	Loose to medium	Loose to medium
Turu 1 Turu 3 (UE 606)	2/2 Twill	Wool	12–13	12–13	z	s	0.2–0.4	0.3–0.5	Medium to hard	Medium to hard
Turu 2 Turu 11 (UE 606)	2/1 Diamond twill	Wool	30	40	S2z	S2z	0.2–0.3	0.2–0.3	Medium to hard (ply)	Medium to hard (ply)

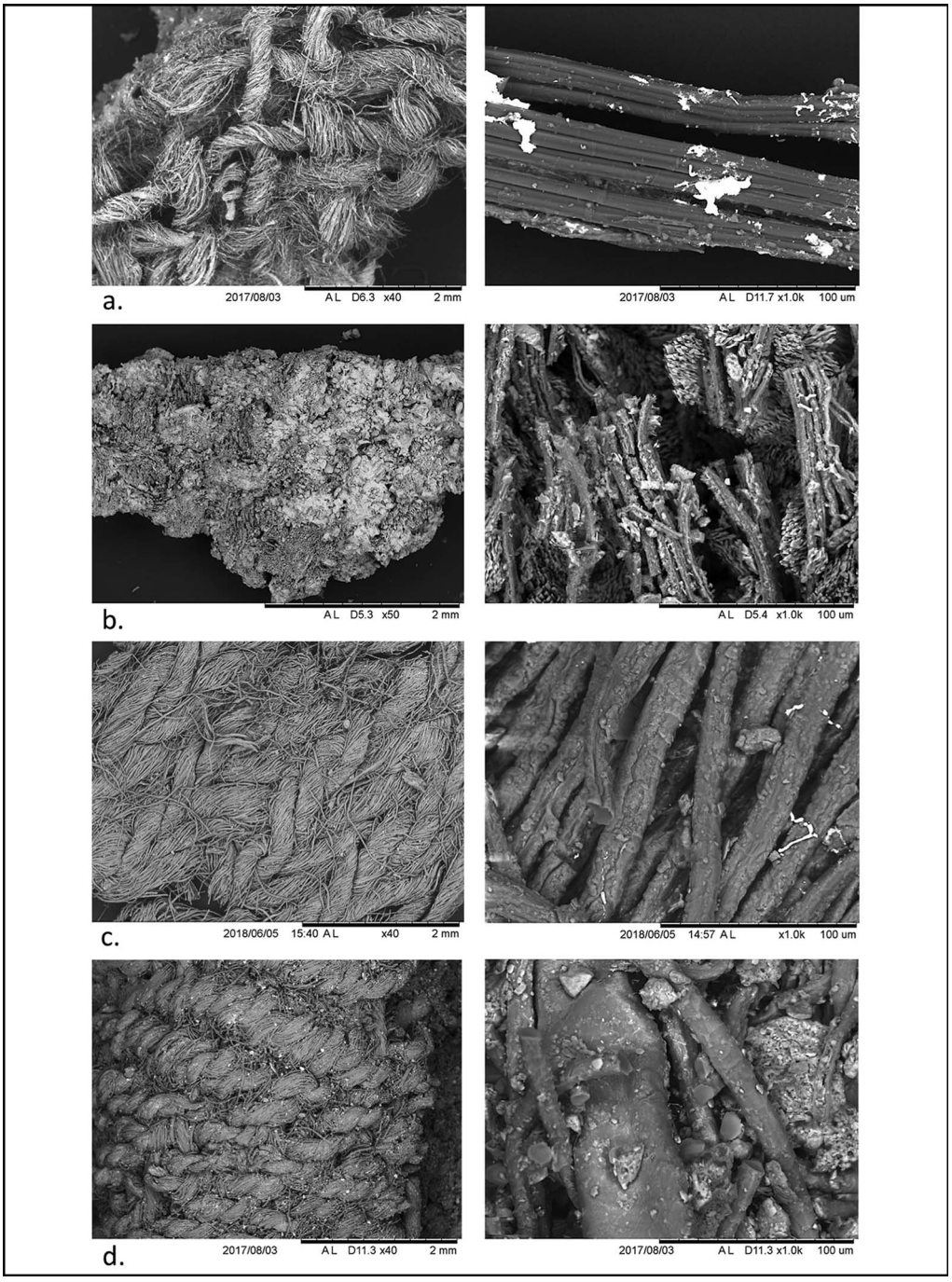

Figure 5. Scanning electron micrographs of textiles found at Casas del Turuñuelo: a) linen tabby from UE 515; b) linen tabby from UE 606; c) 2/2 twill from UE 606; d) 2/1 twill from UE 606 (figure by M. Gleba).

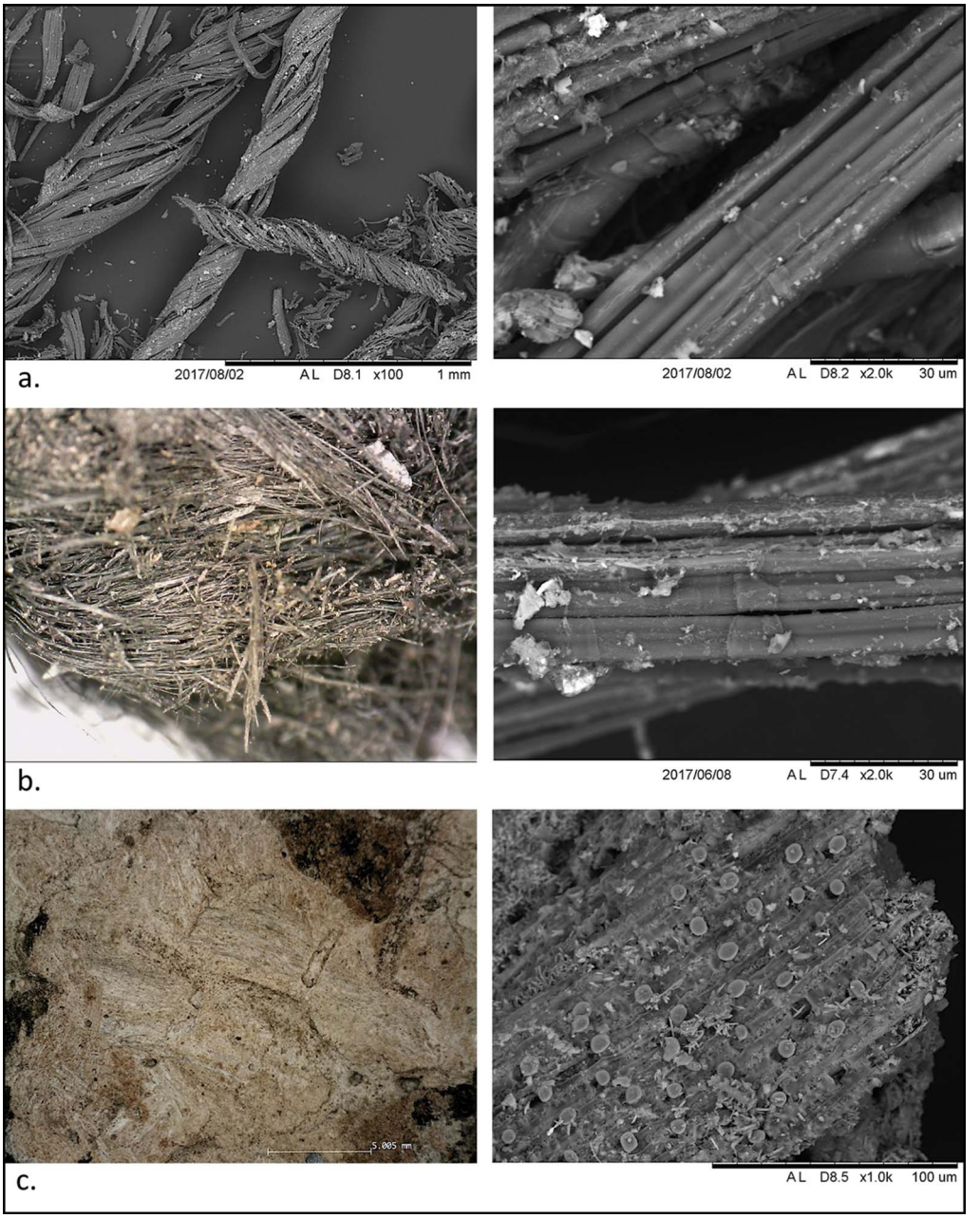

Figure 6. Digital and scanning electron micrographs of threads and fibres found at Casas del Turuñuelo: a) spliced linen threads from UE 606; b) flax fibre bundles from UE 606; c) esparto grass from UE 112 (figure by M. Gleba & B. Marín-Aguilera).

Figure 7. Spindle whorls and loom weights from Casas del Turuñuelo (figure by E. Rodríguez).

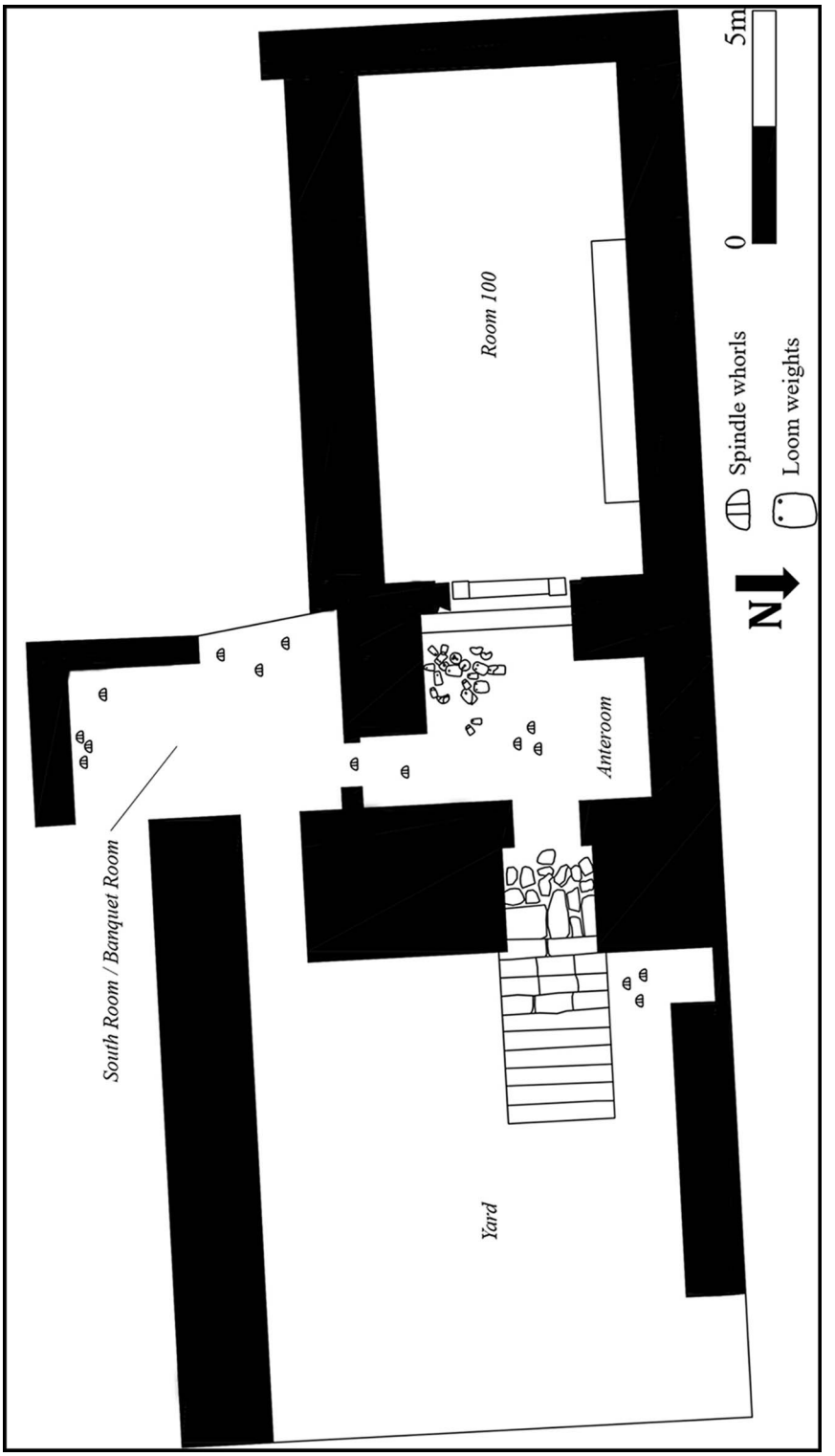

Figure 8. Site map showing the distribution of textile tools (figure by E. Rodríguez).

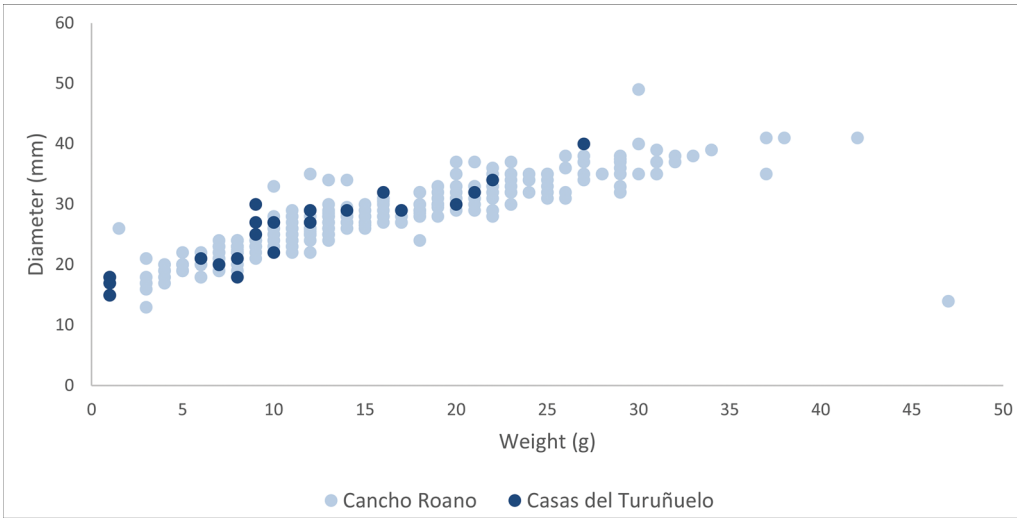

Figure 9. Scatter plot of spindle whorls from Casas del Turuñuelo (with Cancho Roano spindle whorls for comparison) (figure by B. Marín-Aguilera).

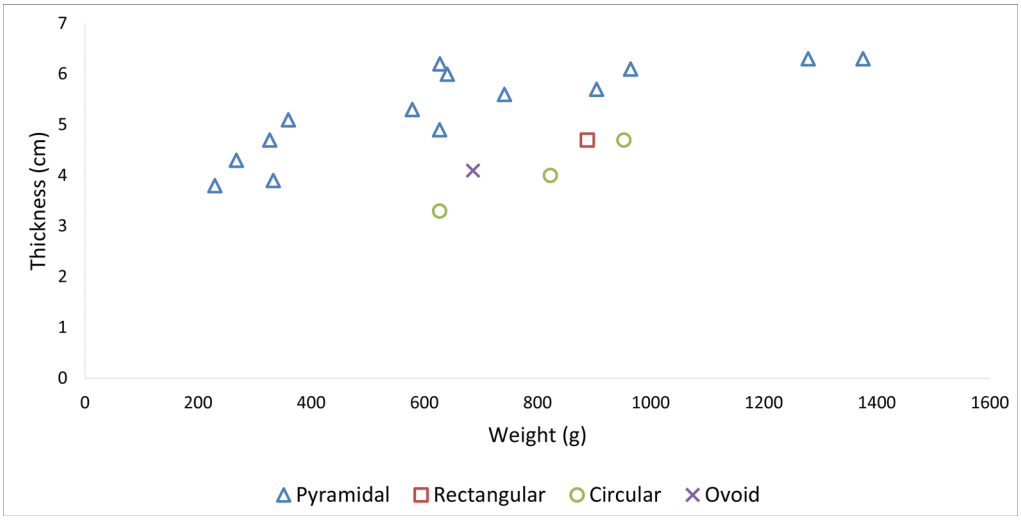

Figure 10. Scatter plot of loom weights from Casas del Turuñuelo (figure by B. Marín-Aguilera).

the Centre for Textile Research in Copenhagen (Mårtensson *et al.* 2009: 392; Andersson Strand & Nosch 2015). As a result of Lena Hammarlund's experiments, however, we have increased the number of threads per loom weight from 40 to 50.

The results of this functional tool analysis demonstrate that all of the textiles found at Casas del Turuñuelo could have been produced using the loom weights excavated at the site. Given the uniqueness of the site and its deliberate destruction and burial, the set of tools probably reflects the entire original assemblage. Excavations, however, are continuing and additional textile tools may yet be found.

Table 2. Loom weight calculations for tabby weave, 2/1 twill and 2/2 twill, with the smallest loom weight found at Casas del Turuñuelo.

Warp thread tension (g)	**5**	**7.5**	**10**	**12.5**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**
Tabby & 2/2 twill: 2 rows of loom weights																
No. of loom weights	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
No. of warp threads for 2 loom weights	92	62	46	36	30	24	18	16	14	12	10	10	8	8	8	6
Warp threads per centimetre	24	16	12	9	8	6	5	4	4	3	3	3	2	2	2	2
2/1 Twill: 3 rows of loom weights																
No. of loom weights	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
No. of warp threads for 3 loom weights	138	93	69	54	45	36	27	24	21	18	15	15	12	12	12	9
Warp threads per centimetre	36	24	18	14	12	9	7	6	6	5	4	4	3	3	3	2
2/2 Twill: 4 rows of loom weights																
No. of loom weights	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104
No. of warp threads for 4 loom weights	184	124	92	72	60	48	36	32	28	24	20	20	16	16	16	12
Warp threads per centimetre	48	33	24	19	16	13	9	8	7	6	5	5	4	4	4	3
Technical evaluation	P*	P	P	P	P	P	P	P	P	P	P	P	U**	U	U	U

* P = Possible.
** U = Unlikely.

Table 3. Loom weight calculations for tabby weave, 2/1 twill and 2/2 twill, with the medium loom weight found at Casas del Turuñuelo.

Warp thread tension (g)	5	7.5	10	12.5	15	20	25	30	35	40	45	50	55	60	65	70
Tabby & 2/2 twill: 2 rows of loom weights																
No. of loom weights	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
No. of warp threads for 2 loom weights	250	168	126	100	84	62	50	42	36	32	28	26	22	20	20	18
Warp threads per centimetre	76	51	38	30	25	19	15	13	11	10	8	8	7	6	6	5
2/1 Twill: 3 rows of loom weights																
No. of loom weights	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
No. of warp threads for 3 loom weights	375	252	189	150	126	93	75	63	54	48	42	39	33	30	30	27
Warp threads per centimetre	114	76	57	45	38	28	23	19	16	15	13	12	10	9	9	8
2/2 Twill: 4 rows of loom weights																
No. of loom weights	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
No. of warp threads for 4 loom weights	500	336	252	200	168	124	100	84	72	64	56	52	44	40	40	36
Warp threads per centimetre	152	102	76	61	51	38	30	25	22	19	17	16	13	12	12	11
Technical evaluation	U**	U	U	P*	P	P	P	P	P	P	P	P	P	P	P	P

* P = Possible.
** U = Unlikely.

Table 4. Loom weight calculations for tabby weave, 2/1 twill and 2/2 twill, with the largest loom weight found at Casas del Turuñuelo.

Warp thread tension (g)	**5**	**7.5**	**10**	**12.5**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**
Tabby & 2/2 twill: 2 rows of loom weights																
No. of loom weights	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
No. of warp threads for 2 loom weights	550	366	276	220	184	138	110	92	78	68	62	56	50	46	42	40
Warp threads per centimetre	87	58	44	35	29	22	17	15	12	11	10	9	8	7	7	6
2/1 Twill: 3 rows of loom weights																
No. of loom weights	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
No. of warp threads for 3 loom weights	825	549	414	330	276	207	165	138	117	102	93	84	75	69	63	60
Warp threads per centimetre	131	87	66	52	44	33	26	22	19	16	15	13	12	11	10	10
2/2 Twill: 4 rows of loom weights																
No. of loom weights	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
No. of warp threads for 4 loom weights	1100	732	552	440	368	276	220	184	156	136	124	112	100	92	84	80
Warp threads per centimetre	175	116	88	70	58	44	35	29	25	22	20	18	16	15	13	13
Technical evaluation	U**	U	U	U	U	U	U	P*	P	P	P	P	P	P	P	P

* P = Possible.
** U = Unlikely.

Discussion

Casas del Turuñuelo is the first site in Iron Age Iberia for which the analysis of textile tools can be combined with the analysis of surviving textiles. Moreover, the site has yielded the first-known evidence for wool twill textiles in the entire Iberian Peninsula, contributing new information to the current debate on the existence of different 'textiles cultures' across ancient Europe (Gleba 2017). Most importantly, Casas del Turuñuelo provides a rich and revealing window into the role of textiles in rituals and the sacrificial economies of the ancient Mediterranean.

The textile and fibre assemblage recovered at Casas del Turuñuelo is, to date, unique in Iberia in its variety of raw materials. The esparto grass mats found on the upper floor of the building were possibly used to even out the floor surface (see Figure 7). The linen tabby found inside a grey ware vessel may have been part of a linen bag containing barley seeds as a ritual offering (Rodríguez-González & Celestino 2017: 191). The tabby textiles, the spliced yarn and the fibre accumulations are all probably made of flax—a plant introduced to the Iberian Peninsula by the early third millennium BC (Jover & López 2013: 150). Linen textiles have also been found at the Chalcolithic cave of Cueva Sagrada I at Lorca and in the numerous Bronze Age burials of the Los Millares and Argaric Cultures (Alfaro 1984, 2005; Jover & López 2013). While the Chalcolithic and Bronze Age Iberian linen textiles all appear to be woven with spliced yarn, the fifth- to fourth-century BC finds from Cadiz, La Albufereta and El Cigarralejo have draft-spun yarn (Alfaro 1983, 1984: 119–21, 138–41; Verdú 2015: 417–18). They are also directly comparable to the two Casas del Turuñuelo linen fragments in terms of weave structure (relatively balanced tabby), twist direction (mostly z-twist) and thread count, which ranges between 10 and 30 threads per centimetre in both systems. The presence of possibly spliced plant fibre threads at Casas del Turuñuelo suggests that the site witnessed the transition between splicing and draft-spinning technologies—a change that corresponds with transition seen in other parts of the Mediterranean after 600 BC (Gleba & Harris 2018).

In contrast to plant fibres, there is currently little direct evidence for the pre-Roman exploitation of animal-based fibres in the Iberian Peninsula. Until now, the earliest wool textile identified in Iberia was recovered at an Iberian-culture sanctuary in Murcia and is dated to the second century BC (Alfaro & Ocharan 2014). The presence of wool has been suggested in the Bronze Age Tomb 121 of the so-called 'Man of Galera' at Castellón Alto (Molina *et al.* 2003: 157). Until scientific analysis of this material is published, however, the textile finds from Casas del Turuñuelo represent the earliest irrefutable evidence for the use of sheep wool in Iberia.

The wool textiles found at Casas del Turuñuelo are woven in twill weave—a technique developed during the Bronze Age (Bender Jørgensen & Rast Eicher 2016: 86). The flexibility of wool makes it more suitable than plant fibres for twill weaving. The only other 2/2 twill fragments found so far in pre-Roman Iberia are from La Albufereta and date to the fourth century BC. They are woven in z-twisted yarn and have 8–10 threads per centimetre in both the warp and weft systems, being somewhat coarser than the 2/2 twill from Casas del Turuñuelo (Alfaro 1984: 147–48, numbers 127–31; Verdú 2015: 417–18). While 2/2 twills woven in z-twisted yarn are common across first-millennium BC Italy and Central Europe (Grömer *et al.* 2013; Gleba 2017), z/s twills are relatively rare. Several fragments of wool

z/s 2/2 twills were found in a mine at Irun (Roman Oiasso) in the Basque Country, and are dated by association with ceramics to AD 50–150 (Alfaro 2014). Closer in date to Casas del Turuñuelo are examples of fifth-century BC z/s 2/2 twills from burial contexts in central and eastern France (Milcent & Moulherat 2000: 314; Verger *et al.* 2002: 124–27).

The 2/1 twill woven in plied yarn in both systems found at Casas del Turuñuelo is unusual. While this example is so far unique for Spain, fifth-century BC comparisons are found, again, in France, where 2/2 and 2/1 twills woven with plied yarn in both systems have been documented at several sites—although none are as fine as the Casas del Turuñuelo twill (Milcent & Moulherat 2000: 314). While twills woven in single yarn are typical for Italy and the Eastern Hallstatt area of Central Europe (eastern Austria, Slovenia, Croatia), the Western Hallstatt region (western Austria, western Germany and France) favoured twills with plied warp and single weft (Banck-Burgess 2012: 61). Plying of the warp may have been a response to a lack of suitable (long) wool fibre in the Western Hallstatt region (Rast Eicher & Bender Jørgensen 2013: 1231). The twills from Casas del Turuñuelo therefore best resemble the material from the Western Hallstatt region.

Textile tool analysis indicates that all of the textiles found at Casas del Turuñuelo could have been produced at the site. The presence of unfinished spliced yarn and fibre accumulations further support the local production of the textiles found on site. Nevertheless, compared to the more specialised textile production at Cancho Roano (Marín-Aguilera in press), the manufacture of textiles at Casas del Turuñuelo—based on the number of loom weights (36) recovered from within the building—appears to have been primarily domestic. It is possible that spinners and weavers were working at the site specifically for the occasion of the final banquet, and that the precious textiles they manufactured, together with their tools, were later included in the sacrifice. The ritual production of textiles at Casas del Turuñuelo is not exceptional in the region; it is also documented at La Mata and Cancho Roano (Marín-Aguilera in press). On a broader scale, there is ample textual and archaeological evidence for this phenomenon in Italy, Greece and the Near East (Gleba 2015; Brøns & Nosch 2017). In contrast to those regions, however, the textiles at Casas del Turuñuelo were sacrificed and destroyed. Thus, they were taken out of circulation, rather than dedicated and 'archived' at a sanctuary (Brøns 2017)—an act that would have allowed the wealth to be reintroduced into circulation (Wengrow 2011).

The site's material culture and architecture more closely resemble Phoenician rituals and practices, with which the inhabitants of the Iberian Peninsula were familiar through interregional trade routes. Inscriptions from Carthage and Marseilles indicate the practice of *zbḥ*, which simultaneously translates as 'offering' and 'sacrifice' in the Phoenician and Punic world (Amadasi 2003: 49–51). Such rituals included a banquet during which meat, cereals, oil and wine were consumed, animals were slaughtered to honour the gods, and precious objects, such as textiles and garments, were consecrated. All these elements have been found at Casas del Turuñuelo, including ivory plaques with gold appliqués of clear Eastern influence (Rodríguez-González & Celestino 2017: 190).

Conclusions

The exceptional preservation of both textiles and tools at Casas del Turuñuelo provides a unique glimpse of textile production and offerings connected to ritual sacrifice in

fifth-century BC Iberia. While the quantity of tools at Cancho Roano attests a greater emphasis on the production of textiles in a ritual context (Marín-Aguilera in press), the discovery of the textiles themselves at Casas del Turuñuelo demonstrates—for the first time in pre-Roman Iberia—their use as ritual offerings. Textiles with very fine threads and high thread counts, such as those recovered at Casas del Turuñuelo, were extremely valuable, as they required high-quality raw materials and substantial time and skill to produce (Harris 2018). Wool twills from Casas del Turuñuelo—the earliest wool fabrics and twill-woven textiles so far found in Iberia—display characteristics generally associated with garments from earlier and contemporaneous European cultures (Gleba 2017). The high quality and value of these garments made them an enormously prized offering (Harris 2018). Indeed, garments were common sacrificial offerings in Greece and other Mediterranean regions (Gleba 2015; Brøns 2017; Brøns & Nosch 2017). Yet, at Casas del Turuñuelo, not only high-quality finished garments, but also the products of the intermediate stages of the textile-production process (e.g. fibre and thread)—including the tools—were sacrificed.

The association of linen and wool textiles, and linen yarn and flax fibre—all probably locally made—with very fine Punic glassware in the immediate vicinity of the sacrificed domestic animals, suggests their deliberate deposition as part of a Phoenician-Punic-type sacrifice. Such rituals are well attested in the Iberian Peninsula (Arruda & Celestino 2009; Escacena & Coto 2010) due to the establishment of trade with the Phoenicians since the ninth century BC. Casas del Turuñuelo, however, is the only site in the Western Mediterranean that has so far provided combined material evidence for animal sacrifice, food and liquid consumption and the consecration of precious textiles and objects described in Near Eastern sources and Western epigraphy as the aforementioned 'zbḥ' (Amadasi 2003: 49–51).

The last phase of Casas del Turuñuelo represents the result of an enormous offering to the gods, in which large quantities of valuable textiles, ceramics, cereals and animals were permanently taken out of circulation by the burning and burial of the complex. The sacrificial act represented an ostentatious renunciation of the social power that these objects might otherwise have conveyed (Warden 2009), and bears witness to the power and control over the resources of this country-estate elite.

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